

**REMARKS**

Reconsideration of this patent application in view of the present amendment and these remarks is respectfully requested.

**I. Claims**

Claims 1-33 and 35-40 are currently pending. Claims 1-2, 4-16, 18-23 and 25-33 stand rejected. Claims 3, 17, and 24 have been objected to. Claims 35-40 are allowed. Claim 1 is now amended. Reconsideration of the above-identified application in view of the amendments to claim 1 and the following remarks is respectfully requested.

**1. Rejection of Claims 1-2, 5-8, 10-16, 19-22 and 25-33 Under 35 U.S.C. §102(a) and 35 U.S.C. §102(e)**

Claims 1-2, 5-8, 10-16, 19-22 and 25-33 have been rejected as anticipated under 35 U.S.C. §102(a) and 35 U.S.C. §102(e) by U.S. Patent Application Publication US 2003/0187506 to Ross et al (hereinafter, "Ross"). It is respectfully submitted that claim 1, as amended, and claims 2, 5-8, 10-16, 19-22 and 25-33 define over Ross.

Anticipation requires a single prior art reference that discloses each element of the claim. W. L. Gore & Associates v. Garlock, Inc., 220 USPQ 303, 313 (Fed. Cir. 1983) *cert. denied* 469 U.S. 851 (1984). For a reference to anticipate a claim, "[t]here must be no difference between the claimed invention and the reference disclosure, as viewed by a person of ordinary skill in the field of the invention." Scripps Clinic & Research Foundation v. Genentech Inc., 1927 F.2d 1565, 8 USPQ2d 1001 (Fed. Cir. 1991).

Claim 1, as amended, recites a method for replacing a damaged spinal disc between first and second vertebrae of a spinal column. The method comprises connecting a first mounting member with the first vertebra of the spinal column. The method also comprises moving an artificial disc between the first and second vertebrae and into engagement with the first mounting member to guide the artificial disc into position between the first and second vertebrae. The artificial disc includes a resilient core having a first surface and a second surface. The artificial disc also includes a first retaining member fixedly connected to the first surface of the resilient core, and a second retaining member fixedly connected to the second surface of the resilient core. The first retaining member has an outer surface directly engageable with the first vertebra of the spinal column after the artificial disc is in position between the first and second vertebrae and an inner surface facing the first surface of the resilient core. The second retaining member has an outer surface directly engageable with the second vertebra of the spinal column after the artificial disc is in position between the first and second vertebrae and an inner surface facing the second surface of the resilient core.

The Office Action states that Ross discloses a method for replacing a damaged spinal disc between first and second vertebrae of a spinal column. According to the Office Action, the method of Ross comprises connecting a first mounting member (member 14 of Ross) with the first vertebrae of the spinal column and moving an artificial disc between the first and second vertebrae and into engagement with the first mounting member to guide the artificial disc into position between the first and second vertebrae. The Office Action also states that the

artificial disc of Ross includes (a) a resilient core (member 20 of Ross) having a first surface and a second surface, (b) a first retaining member (member 22 of Ross), and (c) a second retaining member (member 24 of Ross). Further, according to the Office Action, the first retaining member of Ross has an inner surface facing the resilient core and an outer surface engageable with a first vertebra of the spinal column. The Office Action still further states that the second retaining member of Ross has an inner surface facing the resilient core and an outer surface engageable with a second vertebra of the spinal column.

It is respectfully submitted that Ross does not anticipate the method of amended claim 1 in that each and every element recited in claim 1 is not disclosed by Ross as required by 35 U.S.C. §102(a) and 35 U.S.C. §102(e). Specifically, amended claim 1 recites an artificial disc that includes a first retaining member having an outer surface directly engageable with a first vertebra of the spinal column and a second retaining member having an outer surface directly engageable with a second vertebra of the spinal column. Claim 1 also recites connecting a first mounting member with the first vertebra and moving the artificial disc between the first and second vertebrae and into engagement with the first mounting member to guide movement of the artificial disc into position between the first and second vertebrae. Amended claim 1 further recites that the outer surfaces of the first and second retaining members are directly engageable with the first and second vertebrae, respectively, of the spinal column after the artificial disc is in position between the first and second vertebrae.

The Office Action asserts that members 22 and 24 of Ross correspond to the first and second retaining members, respectively, of claim 1. The Office Action also asserts that the first retaining member of Ross has an outer surface engageable with a first vertebra of the spinal column and that the second retaining member of Ross has an outer surface engageable with a second vertebra of the spinal column. In support of these assertions, the Office Action refers to paragraphs 0028 and 0029 and Figs. 3A, 3B and 7 of Ross.

Paragraphs 0028 and 0029 of Ross, however, make no reference to the asserted first and second retaining members of Ross (members 22 and 24 of Ross) having outer surfaces directly engageable with vertebrae of a spinal column. Likewise, Figs. 3A, 3B and 7 of Ross make no such disclosure. In fact, Fig. 7 of Ross shows that members 14 and 16, not members 22 and 24, of Ross engage vertebrae 60 and 70. Figs. 3A and 3B of Ross, in turn, disclose that members 14 and 16 of Ross cover the adjacent surfaces of members 22 and 24, respectively, and separate the members 22 and 24 from the vertebrae.

Beyond the absence of any disclosure in Ross to support the foregoing assertions in the Office Action, it is respectfully submitted that if the member 14 of Ross is connected with a first vertebra of the spinal column and an artificial disc is moved between the first and second vertebrae and into engagement with the member 14 to guide the artificial disc into position between the first and second vertebrae, there is no possibility of the members 22 and 24 of Ross directly engaging the vertebrae. Specifically, if the members 22 and 24 of Ross are already engaged with the first and second vertebrae, respectively, before the artificial disc that

includes the members 22 and 24 is moved into engagement with the member 14 of Ross, the artificial disc cannot be guided into position between the vertebrae by the member 14 of Ross. If, on the other hand, the mounting member of Ross (member 14 of Ross) is connected with the first vertebra and the artificial disc of Ross is moved into engagement with the member 14 of Ross after the member 14 is connected to the first vertebra to guide movement of the artificial disc into position between the first and second vertebrae, the member 14 of Ross would cover the outer surface of the member 22 of Ross (and a similar member 16 would cover the outer surface of member 24 of Ross). Thus, there would be no possibility of the outer surface of the member 22 of Ross (or the member 24) being directly engageable with a vertebra after the artificial disc is in position between the first and second vertebrae, as recited in amended claim 1.

Since Ross does not disclose an artificial disc that includes a first retaining member having an outer surface directly engageable with a first vertebra of the spinal column after the artificial disc is in position between the first and second vertebrae, as recited in amended claim 1, Ross cannot anticipate claim 1 under 35 U.S.C. §102(a) or 35 U.S.C. §102(e). Amended claim 1 is therefore novel and allowable over Ross.

Claims 2, 5-8, 10-16, 19-22 and 25-33 depend, directly or indirectly, from claim 1 and are allowable for at least the reasons given in the foregoing discussion of amended claim 1 and further for the recitations contained in those claims. It is thus respectfully submitted that claims 2, 5-8, 10-16, 19-22 and 25-33 define over

Ross, and withdrawal of this rejection of claims 2, 5-8, 10-16, 19-22 and 25-33 is respectfully requested.

**2. Rejection of Claims 4, 9 and 18 Under 35 U.S.C. §103(a)**

Claims 4, 9 and 18 have been rejected as unpatentable under 35 U.S.C. §103(a) over Ross. It is respectfully submitted that claims 4, 9 and 18 define over the cited art.

Each of claims 4, 9 and 18 depends, directly or indirectly, from claim 1. The Office Action appears to be premising the rejection of claims 4, 9 and 18 on the rejection of claim 1 and dependent claims 8 and 15 as anticipated under 35 U.S.C. §102(a) and 35 U.S.C. §102(e) by Ross. As previously discussed, however, Ross does not disclose an artificial disc that includes a first retaining member having an outer surface directly engageable with a first vertebra of the spinal column after the artificial disc is in position between the first and second vertebrae, as recited in amended claim 1. Consequently, claim 1 is not anticipated by Ross under 35 U.S.C. §102(a) or 35 U.S.C. §102(e). Further, amended claim 1 is neither suggested nor taught by Ross and is allowable over Ross. As claims 4, 9 and 18 depend, directly or indirectly, from amended claim 1, claims 4, 9 and 18 are allowable for at least the reasons given in the discussion of claim 1 in connection with its rejection as anticipated under 35 U.S.C. §102(a) and 35 U.S.C. §102(e) by Ross and further for the recitations contained in those claims. It is thus respectfully submitted that claims 4, 9 and 18 define over the cited art, and withdrawal of this rejection of claims 4, 9 and 18 is respectfully requested.

**3. Allowable Subject Matter**

The Office Action indicated that claims 3, 17, and 24 were objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form to include all of the limitations of the base claim and any intervening claims. In view of the foregoing remarks concerning the patentability of amended claim 1 from which claims 3, 17, and 24 indirectly depend, claims 3, 17, and 24 are considered to be in condition for allowance in their present dependent form, and allowance of dependent claims 3, 17, and 24 is respectfully requested.

In view of the foregoing amendment and remarks, it is respectfully submitted that claims 1-33 define over the cited art. As previously noted, claims 35-40 have been allowed. Withdrawal of the rejections of and objections to claims 1-33 and passage of the application to issue with all of claims 1-33 and 35-40 is therefore requested.

Please charge any deficiency or credit any overpayment in the fees for this matter to our Deposit Account No. 20-0090.

Respectfully submitted,

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